Public Law 100-570 100th Congress

An Act

To authorize appropriations for the National Science Foundation, and for other purposes.

Oct. 31, 1988 [H.R. 4418]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

National Science Foundation Authorization Act of 1988.

SHORT TITLE

Section 1. This Act may be cited as the "National Science Foundation Authorization Act of 1988".

42 USC 1861 note.

TITLE I-NATIONAL SCIENCE FOUNDATION AUTHORIZATION

AUTHORIZATION OF APPROPRIATIONS

Sec. 101. (a) Congress finds that to strengthen basic research and human resources in science and engineering the programs of the National Science Foundation (hereinafter referred to as the "Foundation") should be adequately funded.

(b) There is authorized to be appropriated to the Foundation \$2,050,000,000 for fiscal year 1989, which shall be available for the

following categories:

(1) Research and Related Activities, \$1,653,500,000, which shall be available for the following subcategories:
(A) Mathematical and Physical Sciences, \$507,800,000.

(B) Engineering, \$198,000,000.

Behavioral, (C) Biological, and Social Sciences, \$288,700,000.

(D) Geosciences, \$320,900,000.

(E) Computer and Information Science and Engineering, \$162,100,000.

Technology Research (F) Science and

\$25,000,000.

(G) Scientific, Technological, and International Affairs,

\$56,000,000.

(H) Program Development and Management, \$95,000,000. (2) Science and Engineering Education, \$175,500,000, of which \$17,500,000 shall be available for College Science Instru-

(3) United States Antarctic Program, \$141,000,000.

(4) Academic Research Facilities Modernization, \$80,000,000. (c) There is authorized to be appropriated to the Foundation \$2,388,000,000 for fiscal year 1990, which shall be available for the following categories:

(1) Research and Related Activities, \$1,910,700,000, which

shall be available for the following subcategories:

(A) Mathematical and Physical Sciences, \$588,500,000.

(B) Engineering, \$229,500,000.

(C) Biological, Behavioral, and Social Sciences, \$334,600,000.

(D) Geosciences, \$372,000,000.

(E) Computer and Information Science and Engineering, \$188,000,000.

(F) Science and Technology Research Centers, \$30,000,000.

(G) Scientific, Technological, and International Affairs, \$65.000.000.

(H) Program Development and Management, \$103.100.000.

(2) Science and Engineering Education, \$205,300,000.(3) United States Antarctic Program, \$147,000,000.

(4) Academic Research Facilities Modernization, \$125,000,000.
(d) There is authorized to be appropriated to the Foundation \$2,782,000,000 for fiscal year 1991, which shall be available for the following categories:

(1) Research and Related Activities, \$2,200,200,000, which

shall be available for the following subcategories:

(A) Mathematical and Physical Sciences, \$681,500,000.

(B) Engineering, \$265,800,000.

(C) Biological, Behavioral, and Social Sciences, \$387,400,000.

(D) Geosciences, \$430,800,000.

(E) Computer and Information Science and Engineering, \$217,600,000.

(F) Science and Technology Research Centers,

\$30,000,000.

- (G) Scientific, Technological, and International Affairs, \$75,200,000.
- (H) Program Development and Management, \$111,900,000.

(2) Science and Engineering Education, \$240,200,000. (3) United States Antarctic Program, \$154,100,000.

- (4) Academic Research Facilities Modernization, \$187,500,000.
 (e) There is authorized to be appropriated to the Foundation
- \$3,245,000,000 for fiscal year 1992, which shall be available for the following categories:

 (1) Research and Related Activities, \$2,552,000,000.

(2) Science and Engineering Education, \$281,000,000. (3) United States Antarctic Program, \$162,000,000.

- (4) Academic Research Facilities Modernization, \$250,000,000.(f) There is authorized to be appropriated to the Foundation
- \$3,505,000,000 for fiscal year 1993, which shall be available for the following categories:
 - Research and Related Activities, \$2,772,000,000.
 Science and Engineering Education, \$308,000,000.
 United States Antarctic Program, \$175,000,000.

(4) Academic Research Facilities Modernization, \$250,000,000.

(g) Notwithstanding any other provision of this Act-

(1) not less than \$5,000,000 of the amount authorized in subsection (b)(2) is authorized only for purposes of teacher training and enhancement and for development of model curriculum tailored for science and mathematics instruction, and instruction in technician training programs, in two-year and community colleges; and

(2) in allocating funds authorized under this section for planning grants for Science and Technology Centers, the Director of the Foundation (hereinafter referred to as the "Director") shall give due consideration to the need to establish centers in geographic areas of the United States in which there is no nation-

ally recognized research university.

(h)(1) If the total amount appropriated for a program category specified in subsections (b) through (f) of this section is less than the total amount authorized to be appropriated for such category under this section, the portion of such appropriated amount that shall be available for spending for each subcategory of such category, and for each program of such category or subcategory for which a funding floor is specified, shall be determined as follows:

(A) For each subcategory, the amount available for spending shall be equal to the amount specified in subsections (b) through (f) for that subcategory, as multiplied by the funding availability

percentage.

(B) For each program of any category or subcategory for which a funding floor is specified, the amount available for spending shall be equal to the amount specified in this section as the floor for that program, as multiplied by the funding availability percentage.

(2) For the purposes of this subsection, the term "funding availability percentage" means the percentage determined by dividing—

(A) the total amount appropriated for a program category specified in subsection (b), (c), (d), (e), or (f) of this section by (B) the total amount authorized under subsection (b), (c), (d),

(e), or (f) for that category.

AVAILABILITY OF APPROPRIATIONS

Sec. 102. Appropriations made under authority provided in section 101 of this Act shall remain available for obligation for periods specified in the Acts making the appropriations.

CONSULTATION AND REPRESENTATION EXPENSES

Sec. 103. From appropriations made under authorizations provided in this Act, not more than \$7,500 may be used in each fiscal year for official consultation, representation, or other extraordinary expenses at the discretion of the Director. The determination of the Director will be final and conclusive upon the accounting officers of the Government.

TRANSFER OF FUNDS

Sec. 104. (a) In any given fiscal year, funds may be transferred among the categories listed in section 101, and among subcategories listed in section 101, so long as the net funds transferred to or from any category, or to or from any subcategory, do not exceed 10 percent of the amount authorized for that category or subcategory.

(b) In addition, the Director may propose transfers to or from any category exceeding 10 percent of the amount authorized for that category in section 101, and to or from any subcategory in which the net funds transferred exceed 10 percent of the amount authorized for that subcategory. An explanation of any such proposed transfer must be transmitted in writing to the Committee on Science, Space, and Technology of the House of Representatives, and the Com-

mittees on Labor and Human Resources and Commerce, Science, and Transportation of the Senate. The proposed transfer may be made only when 30 calendar days have passed after transmission of such written explanation.

ADMINISTRATIVE AMENDMENTS

Sec. 105. (a) Section 4 of the National Science Foundation Act of 1950 (42 U.S.C. 1863) is amended by adding at the end thereof the

following:

Classified information.

"(k) Portions of Board meetings in which the Board considers proposed Foundation budgets for a particular fiscal year may be closed to the public until the President's budget for that fiscal year has been submitted to the Congress.".

(b) Subsection (c) of section 15 of the National Science Foundation

Act of 1950 (42 U.S.C. 1874) is repealed.

(c) Section 36(f) of the Science and Technology Equal Opportuni-

ties Act (42 U.S.C. 1885c(f)) is amended to read as follows:

"(f) Every two years, the Committee shall prepare and transmit to the Director a report on its activities during the previous two years and proposed activities for the next two years. The Director shall transmit to Congress the report, unaltered, together with such comments as the Director deems appropriate.".

TEMPORARY PERSONNEL

Sec. 106. Section 14(a) of the National Science Foundation Act of 1950 (42 U.S.C. 1873(a)) is amended by inserting "(1)" immediately after "(a)", and by adding at the end the following new paragraphs:

"(2) The Director may, under the authority provided by paragraph (1) of this subsection and in accordance with such policies as the Board chooses to prescribe, appoint for a limited term, or on a temporary basis, scientists, engineers, and other technical and professional personnel on leave of absence from academic, indus-

trial, or research institutions to work for the Foundation.

"(3) The Foundation may pay, to the extent authorized for certain other Federal employees by section 5723 of title 5, United States Code, travel expenses for any individual appointed for a limited term or on a temporary basis and transportation expenses of his or her immediate family and his or her household goods and personal effects from that individual's residence at the time of selection or assignment to his or her duty station. The Foundation may pay such travel expenses and transportation expenses to the same extent for such an individual's return to the former place of residence from his or her duty station, upon separation from the Federal service following an agreed period of service. The Foundation may also pay a per diem allowance at a rate not to exceed the daily amounts prescribed under section 5702 of title 5, United States Code, to such an individual, in lieu of and when less than transportation expenses of the immediate family and household goods and personal effects, for the period of his or her employment with the Foundation. Notwithstanding any other provision of law, the employer's contribution to any retirement, life insurance, or health benefit plan for an individual appointed for a term of one year or less, which could be extended for no more than one additional year, may be made or reimbursed from appropriations available to the Foundation.".

Reports.

Wages.

BUDGET ESTIMATES

SEC. 107. Section 14 of the National Science Foundation Act of 1950 (42 U.S.C. 1873) is amended by adding at the end the following

new subsection:

"(j) Starting with fiscal year 1990, the Foundation shall submit to the Congress in each fiscal year, at the time of the release of the President's budget, a three-year budget estimate for the Foundation. The three-year budget shall include funding estimates for each major activity, including each scientific directorate, the United States Antarctic Program, the Science and Engineering Education Directorate, and the Program Development and Management activity.".

FINANCIAL DISCLOSURE REPORT FOR BOARD MEMBERS

SEC. 108. Section 4 of the National Science Foundation Act of 1950 (42 U.S.C. 1863) is amended by adding at the end the following new subsection:

"(k) Members of the Board shall be required to file a financial disclosure report under title II of the Ethics in Government Act of 1978 (5 U.S.C. App. 92 Stat. 1836), except that such reports shall be held confidential and exempt from any law otherwise requiring their public disclosure.".

Classified information.

EVALUATIONS OF RESEARCH CENTERS

SEC. 109. In carrying out performance reviews of research centers 42 USC 1862e. by the Foundation, the Director shall take such action as may be necessary, consistent with the merit review process of the Foundation, to ensure that-

(1) members of review panels are free from any conflict of interest; and

(2) the conditions of each award to such centers have been fulfilled.

RESEARCH CENTER CONSORTIA

Sec. 110. In Foundation programs making grants to research centers, the Director shall encourage the formation of consortia that include research universities, two-year and four-year colleges, and the private sector.

42 USC 1862f.

BUY-AMERICAN REQUIREMENTS

SEC. 111. (a) The Director shall, to the maximum extent practicable and consistent with current law, award to domestic firms any contracts for the purchase of goods and services intended for direct use by the Foundation.

Contracts. 42 USC 1870a.

(b) The Director shall, as soon as possible after the date of Reports. enactment of this Act, prepare a report on-

(1) the number of Foundation contracts entered into with foreign firms in fiscal year 1988;

(2) the number of such contracts entered into with domestic

firms in that fiscal year;

(3) the number of contracts entered into with foreign firms where the Foundation also received a technically acceptable bid from a domestic firm; and

(4) any steps the Foundation will take to increase the number of contracts awarded to domestic firms.

Such report shall be submitted to the Committee on Science, Space, and Technology of the House of Representatives and the Committees on Labor and Human Resources and Commerce, Science, and Transportation of the Senate.

(c) For the purposes of this section—

(1) the term "domestic firm" means a business entity which is organized under the laws of the United States or the laws of a State, district, commonwealth, territory, or possession of the United States, and which conducts business operations in the United States; and

(2) the term "foreign firm" means a business entity not

described in paragraph (1).

UNDERGRADUATE SCIENCE IMPROVEMENT

20 USC 3911 note. Sec. 112. (a) The Congress finds that the support of undergraduate science and engineering education is a critical component in a comprehensive national policy intended to ensure the Nation's future supply of scientists and engineers.

Women. Minorities. Handicapped persons. (b) In accordance with the provisions of this Act, the Foundation shall support undergraduate science and engineering activities in instrumentation and laboratory improvement, undergraduate faculty enhancement, undergraduate research opportunities, undergraduate curriculum development, and efforts to encourage the participation of women, minorities, and the disabled in such fields.

(c) In carrying out the provisions of this section, the Foundation shall take into account the special needs of two-year and four-year

colleges and universities.

EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH

42 USC 1862g.

Sec. 113. (a) The Director shall operate an Experimental Program to Stimulate Competitive Research, the purpose of which is to assist those States that—

(1) historically have received relatively little Federal research

and development funding; and

(2) have demonstrated a commitment to develop their research bases and improve science and engineering research and

education programs at their universities and colleges.

(b) A State which has received an initial award under such Program, whether or not the award was received before or after the date of enactment of this Act, shall be eligible for up to 5 years of additional support under the program if that State provides assurances of new matching funds and submits an acceptable new plan for using Program funds and matching funds to build the research capabilities of the State.

COLLEGE AND UNIVERSITY INNOVATION RESEARCH

Reports.

Sec. 114. The Director shall prepare and submit, not later than March 1, 1989, a report to the Committee on Labor and Human Resources and Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Science, Space, and Technology of the House of Representatives on assisting academic researchers at a wide range of colleges and universities, including smaller institutions and institutions which do not traditionally

receive Federal research funds, to pursue high-quality research of

economic potential. The report shall-

 describe the procedures, terms, and conditions necessary for the establishment of a program patterned after the Small Business Innovation Research program to assist college and university faculty to pursue research of economic potential;

(2) analyze the feasibility of establishing funding recoupment

mechanisms to offset the cost of such assistance; and

(3) state whether such a program is appropriate and feasible and, if so, the steps the Director shall take to establish and carry out such a program.

EARTHQUAKE ENGINEERING RESEARCH

Sec. 115. (a) The National Academy of Sciences shall conduct a study of earthquake engineering activities being carried out by the Foundation and other Federal agencies under the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7701 et seq.). Such study shall include—

42 USC 7704 note.

- (1) an assessment of the adequacy of each agency's current Federal earthquake engineering efforts, including those designed to increase the implementation of new techniques; the need for specialized research facilities, including large-scale facilities; the division of responsibilities among the various Federal agencies; and recommended levels of funding that the Foundation and other agencies should provide, in the form of grants to individuals, groups, and centers, to non-Federal researchers principally engaged in earthquake engineering research; and
- (2) recommendations, if any, of the National Academy of Sciences for improvements in the current Federal efforts in the area of earthquake engineering research.

(b) The results of the study required by subsection (a) of this section shall be reported to the Congress on or before the expiration of the 12-month period following the date of enactment of this Act.

(c) In carrying out such study, the National Academy of Sciences is authorized to call upon any agency, department, or other instrumentality or entity of the United States for cooperation, and such agency, department, instrumentality, or entity shall provide such cooperation.

DESALINATION REPORT

SEC. 116. The Office of Science and Technology Policy shall prepare and submit a report to the Congress not later than December 1, 1988, on desalination research and technology. The report shall—

(1) describe the state of desalination research and technology

being conducted by agencies of the Federal Government;

(2) recommend an agency of the Federal Government to be the lead agency on desalination research and technology;

(3) recommend ways to spur research and technology to

decrease the cost of desalination; and

(4) recommend how desalination research and technology can be used as a component of the foreign assistance program of the United States. Reports.

PRESIDENTIAL AWARDS FOR TEACHING EXCELLENCE

42 USC 1881b.

Sec. 117. (a)(1)(A) The President is authorized to make Presidential Awards for Excellence in Mathematics and Science Teaching to kindergarten through grade 12 school teachers of mathematics and science who have demonstrated outstanding teaching ability in the field of teaching mathematics or science.

(B) Each year the President is authorized to make no fewer than 108 awards under subparagraph (A). In selecting teachers for an award authorized by this subsection, the President shall select at

least two teachers—

(i) from each of the several States;
(ii) from the District of Columbia:

(iii) from the Commonwealth of Puerto Rico:

(iv) from among the Trust Territory of the Pacific Islands, the Commonwealth of the Northern Mariana Islands, and other commonwealths, territories, and possessions of the United States; and

(v) from the United States Department of Defense Depend-

ents' School.

(2) The President shall carry out this subsection, including the establishment of the selection procedures, after consultation with the Director and other appropriate officials of Federal agencies.

(3)(A) Funds to carry out this subsection for any fiscal year shall be made available from amounts appropriated pursuant to annual authorization of appropriations for the Foundation for Science and Engineering Education.

(B) Amounts made available pursuant to subparagraph (A) shall be available for making awards under this subsection, for administrative expenses, for necessary travel by teachers selected under this subsection, and for special activities related to carrying out this subsection.

(b)(1) Part C of title II of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 2701 et seq.), as amended by the Augustus F. Hawkins-Robert T. Stafford Elementary and Secondary School Improvement Amendments of 1988, is amended to read as follows:

"PART C—PRESIDENTIAL AWARDS FOR TEACHING EXCELLENCE IN FOREIGN LANGUAGES

20 USC 3011.

"SEC, 2201, PRESIDENTIAL AWARDS.

"(a) GENERAL AUTHORITY.—The President is authorized to make Presidential Awards for Teaching Excellence in Foreign Languages to elementary and secondary school teachers of foreign languages who have demonstrated outstanding teaching ability in the field of teaching foreign languages.

"(b) LIMITATIONS.—Each year the President is authorized to make 108 awards under subsection (a). In selecting elementary and secondary school teachers for an award authorized by this section, the President shall select at least one elementary school teacher and

one secondary school teacher-

"(1) from each of the several States; "(2) from the District of Columbia;

"(3) from the Commonwealth of Puerto Rico;

"(4) from among the Trust Territory of the Pacific Islands, the Commonwealth of the Northern Mariana Islands, and other commonwealths, territories, and possessions of the United States: and

"(5) from the United States Department of Defense Depend-

ents' School.

"SEC. 2202. ADMINISTRATIVE PROVISIONS.

20 USC 3012.

"(a) In General.—There are authorized to be appropriated

\$1,000,000 for each fiscal year to carry out this part.

"(b) AVAILABILITY.—Amounts appropriated pursuant to subsection (a) shall be available for making awards under this part, for administrative expenses, for necessary travel by teachers selected under this part, and for special activities related to carrying out this

(2) The items in the table of contents of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 2701 et seq.) relating to

part C of title II are amended to read as follows:

"PART C-PRESIDENTIAL AWARDS FOR TEACHING EXCELLENCE IN FOREIGN LANGUAGES

"Sec. 2201. Presidential awards.

"Sec. 2202. Administrative provisions.".

DRUG-FREE WORKPLACE

Sec. 118. (a) No funds authorized to be appropriated under this 42 USC 1875 Act, or under any other Act authorizing appropriations for fiscal year 1989 through 1993 for the Foundation, shall be obligated or expended unless the Foundation has in place, and will continue to administer in good faith, a written policy designed to ensure that all of its workplaces are free from the illegal use, possession, or distribution of controlled substances (as defined in the Controlled

Substances Act) by the officers and employees of the Foundation.

(b) No funds authorized to be appropriated to the Foundation for fiscal years 1989 through 1993 shall be available for payment in connection with any grant, contract, or other agreement, unless the recipient of such grant, contractor, or party to such agreement, as the case may be, has in place and will continue to administer in good faith a written policy, adopted by the board of directors or other governing authority of such recipient, contractor, or party, satisfactory to the Director of the Foundation, designed to ensure that all of the workplaces of such recipient, contractor, or party are free from the illegal use, possession, or distribution of controlled substances (as defined in the Controlled Substances Act) by the officers and employees of such recipient, contractor, or party.

TITLE II—ACADEMIC RESEARCH FACILITIES MODERNIZATION

SHORT TITLE

SEC. 201. This title may be cited as the "Academic Research 42 USC 1861 Facilities Modernization Act of 1988".

Academic Research **Facilities** Modernization Act of 1988.

note

FINDINGS AND PURPOSE

Sec. 202. (a) The Congress finds that—

42 USC 1862a.

(1) the fundamental research and related education program supported by the Federal Government and conducted by the Nation's universities and colleges are essential to our national security, and to our health, economic welfare, and general wellbeing;

(2) many national research and related education programs conducted by universities and colleges are now hindered by obsolete research buildings and equipment, and many institutions lack sufficient resources to repair, renovate, or replace

their laboratories;

(3) the Nation's capacity to conduct high quality research and education programs and to maintain its competitive position at the forefront of modern science, engineering, and technology is threatened by this research capital deficit, which poses serious and adverse consequences to our future national security, health, welfare, and ability to compete in the international marketplace;

(4) a national effort to spur reinvestment in research facilities is needed, and national, State, and local policies and cooperative programs are required that will yield maximum return on the investment of scarce national resources and sustain a commit-

ment to excellence in research and education; and

(5) the Foundation, as part of its responsibility for maintaining the vitality of the Nation's academic research, and in partnership with the States, industry, and universities and colleges, must assist in enhancing the historic linkages between Federal investment in academic research and training and investment in the research capital base by reinvesting in the capital facilities which modern research and education programs require.

(b) It is the purpose of this title to assist in modernizing and revitalizing the Nation's research facilities at institutions of higher education, independent non-profit research institutions and research museums, and consortia thereof, through capital investment.

ESTABLISHMENT OF PROGRAM

42 USC 1862b.

Sec. 203. (a)(1) To carry out this title, the Director shall establish and carry out a new Academic Research Facilities Modernization Program (hereafter in this title referred to as the "Program"), under which awards are made to institutions of higher education, independent nonprofit research institutions, and research museums, and consortia thereof, for the repair, renovation, or, in exceptional cases, replacement of obsolete science and engineering facilities primarily devoted to research.

(2) Such awards shall, consistent with the functions of the Foundation set forth in section 3 of the National Science Foundation Act of 1950 (42 U.S.C. 1862) and through established Foundation selection

procedures, serve to—

(A) promote the modernization of graduate academic science and engineering research laboratories and related facilities so as to facilitate and support research in the scientific and

engineering disciplines;

(B) assist those academic institutions that historically have received relatively little Federal research and development funds to improve their academic science and engineering infrastructures and broaden and strengthen the Nation's science and engineering base; and

(C) promote the modernization of undergraduate academic science and engineering research laboratories and related facilities so as to facilitate and support research in the scientific and

engineering disciplines.

(b)(1) The Program shall be carried out through projects which involve the repair, renovation, or, in exceptional cases, replacement of specific science and engineering facilities devoted primarily to research at eligible institutions, or consortia thereof, and for which funds are awarded in response to specific proposals submitted by such eligible institutions or consortia in accordance with procedures prescribed by the Director pursuant to section 204 of this Act.

(2) Awards made under the Program shall not exceed \$7,000,000 to any institution or consortium over any period of 5 years for the repair, renovation, or, in exceptional cases, replacement of academic

research facilities.

(3) The Director shall, in making awards under the Program, consider the extent to which that institution or consortium has received funds for the repair, renovation, construction, or replacement of academic facilities from any other Federal funding source within the 5-year period immediately preceding the application. The Director shall give priority to institutions or consortia that have not received such funds in the preceding 5 years.

(4) The Director shall, in awarding funds under this title, consider the distribution of funds among institutions of different sizes and

geographical locations.

(c) Criteria for the award of funds to any institution for a project under the Program shall include-

(1) the quality of the research and training to be carried out in

the facility or facilities involved; (2) the need for the proposed repair, renovation, or, in exceptional cases, replacement based on an analysis of the age and

condition of existing research facilities and equipment; (3) the congruence of the institution's research and training

activities with the future research needs of the Nation and the research mission of the Foundation:

(4) the contribution that the project will make toward meeting national, regional, and institutional research and related train-

ing needs;

(5) in the case of an institution that historically has received relatively little Federal research and development funding, the contribution the proposed project will make to improving the institution's academic scientific and engineering infrastructure and broadening the Nation's science and engineering base; and

(6) the impact of the award on the overall geographic distribution of awards made under the Program, with the objective of

avoiding undue concentration of awards.

PROCEDURES, GUIDELINES, AND PLANNING ACTIVITIES

SEC. 204. (a)(1) The Director shall, consistent with the objectives of 42 USC 1862c. the Program and the criteria set forth in section 203(c) of this Act, set forth procedures for the Program.

(2) The procedures so prescribed shall contain such terms, conditions, and guidelines as may be necessary in the light of Program objectives, but shall in any event provide that-

(A) funds to carry out the Program will be awarded only on the basis of merit after a comprehensive review using estab-

lished Foundation procedures;

(B) the membership of merit review panels that assess proposals will be broadly representative of eligible institutions, including research universities and predominantly undergraduate and

minority institutions;

(C) the institution receiving an award shall provide at least 50 percent of the cost, in cash or in kind, fairly evaluated, of the repair, renovation, or replacement involved and shall provide this contribution from private or non-Federal public sources, except that the Director may accept a match of less than 50 percent, but at least 30 percent, for institutions which are not ranked among the top 100 of the institutions receiving Federal research and development funding, as documented in the latest annual report of the Foundation entitled "Federal Support to Universities, Colleges, and Selected Nonprofit Institutions"; and

(D) to the extent practicable, eligible institutions of a given type will compete against similar institutions for Program

awards.

(b) The Director shall conduct comprehensive planning activities, including surveys of research facility needs and other information-gathering activities, necessary to implement the Program and to develop the procedures called for under subsection (a) of this section.

(c) Prior to the issuance of the comprehensive plan required by subsection (d) of this section, and consistent with the Program criteria set forth in section 203(c) of this Act, the Director shall publish in the Federal Register proposed Program guidelines for public review for a comment period of 30 days. Such guidelines shall provide detailed information on eligibility, criteria, terms, and conditions and shall include, but not be limited to—

(1) definitions for the terms "institutions of higher education", "private non-profit research organizations", "research museums", "consortia", "facilities", "facilities primarily devoted to research", "instrumentation", "equipment", "repair",

"renovation", and "replacement";

(2) selection criteria to be used by the Foundation in evaluating proposals from institutions and consortia thereof, including criteria for evaluating scientific merit and for evaluating the age and condition of existing research facilities; and

(3) requirements for matching a Program award with con-

tributions from non-Federal sources.

(d) The Director, after gathering appropriate information and after considering comments on the proposed Program guidelines published in the Federal Register pursuant to subsection (c) of this section, shall develop a comprehensive plan for the Program that—

(1) defines the appropriate roles and responsibilities of the Federal Government, institutions of higher education, State governments, private foundations, and other appropriate

organizations;

(2) states what procedures will be used to ensure that predominantly undergraduate institutions and colleges and universities that historically have received little Federal research and development funding will receive substantial percentages of the funds awarded under this title;

(3) states the estimated percentage of Program funds available for each category of eligible institutions, including

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predominantly undergraduate institutions and colleges and universities that historically have received little Federal research and development funding as well as research universities: and

(4) evaluates and addresses, to the maximum extent possible,

a variety of factors which include-

(A) the unique circumstances and research facilities needs of research universities, undergraduate institutions, and other institutions whose enrollment includes substantial percentages of minorities underrepresented in science and engineering research:

(B) innovative approaches in the management of the Program that address both short-term and long-term aspects of the renovation, repair, and replacement of aca-

demic research facilities:

(C) programmatic approaches that recognize and support excellence, strengthen scientific and engineering research potential and, to the maximum extent possible and consistent with the purposes of this Act, assure an equitable distribution of resources with respect to institutions and geographical areas; and

(D) any recommendations necessary to improve the Pro-

gram and further meet the purposes of this title.

(e) The Director shall prepare and submit, not later than June 15, 1989, a report containing the comprehensive plan required by subsection (d) of this section to the Committee on Labor and Human Resources and the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives.

(f) Final guidelines shall be published in the Federal Register not later than 45 days after the submission of the report required under

subsection (e).

(g) The Director shall, from amounts available to the Foundation under section 101(b) of this Act for fiscal year 1989, make available an amount, not to exceed \$1,000,000, to carry out the provisions of this section. None of the funds authorized to be appropriated in section 101 of this Act may be used for grant or contract awards under the Program prior to completion and submission to Congress of the comprehensive plan required by subsection (d) of this section.

(h) In conducting the activities under the Program, the Director shall consult with the Secretary of Education and the heads of other

related agencies.

SET-ASIDE FOR CERTAIN INSTITUTIONS

SEC. 205. Of the amounts appropriated to the Foundation for the 42 USC 1862d. Program, as authorized under section 101 of this Act, in each fiscal year, at least 12 percent shall be reserved for historically Black

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colleges or universities defined as "part B institutions" by section 322(2) of the Higher Education Act of 1965 (20 U.S.C. 1061(2)) and other institutions of higher education whose enrollment includes a substantial percentage of students who are Black Americans, Hispanic Americans, or Native Americans.

CONFORMING AMENDMENT

42 USC 1861 note, 1862a. 1862b.

SEC. 206. Subtitle E of title IV (sections 6401-6403) of the Omnibus Trade and Competitiveness Act of 1988 is repealed.

Approved October 31, 1988.

LEGISLATIVE HISTORY-H.R. 4418 (S. 1632):

HOUSE REPORTS: No. 100-649 (Comm. on Science, Space, and Technology). SENATE REPORTS: No. 100-148 (Comm. on Labor and Human Resources) and No. 100-331 (Comm. on Commerce, Science, and Transportation) both accompanying S. 1632. CONGRESSIONAL RECORD, Vol. 134 (1988):

June 9, considered and passed House.

June 17, S. 1632 considered in Senate; proceedings vacated and H.R. 4418, amended, passed in lieu.

Sept. 27, House concurred in certain Senate amendment, in another with an amendment.

Oct. 14, Senate concurred in House amendment.